TENTATIVE DETERMINATION DRAFT

Appendix A: Specific Requirements for Discharge Categories

Table of Contents

TABLE OF CONTENTS	A-1
DISCHARGE CATEGORY A: DISINFECTION OR HYDROSTATIC TESTING OF TAPIPES OR PIPELINES	
DISCHARGE CATEGORY B: DISCHARGES FROM POTABLE WATER SYSTEMS	A-5
DISCHARGE CATEGORY C: DEWATERING FROM CONSTRUCTION ACTIVITIES	3-A
DISCHARGE CATEGORY D: GROUNDWATER REMEDIATION	A-10
DISCHARGE CATEGORY E: DRAINING OR FLUSHING OF FIRE CONTROL SYS	TEMS A-16
DISCHARGE CATEGORY F: UNTREATED "WATER" DISCHARGES	A-18
DISCHARGE CATEGORY G: TANK BOTTOM WASTEWATER	A-19
DISCHARGE CATEGORY H: STORMWATER DISCHARGES FROM ABOVEGROU	

You must comply with Appendix A discharge-category-specific requirements associated with each discharge category applicable to your facility. These requirements are in addition to any requirements specified elsewhere in this permit, particularly those specified in Part III.C.

Discharge Category A: Disinfection or Hydrostatic Testing of Tanks, Pipes or Pipelines

Eligible Discharges:

Wastewater from disinfection (using only chlorine or bromine as a disinfecting agent) or hydrostatic testing of new or used tanks, pipes, or pipelines. This section does not include potable water systems operations (refer to Category B).

Numerical Limitations:

The following numerical limitations are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Requirements for all discharges of hydrostatic test water under this category:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Discharge	Measured	(1)
Total Suspended Solids		60		mg/L	See Note 2	Grab	(2)
рН	6.0	9.0		s.u.	See Note 2	Grab	(2)

Additional requirements for discharges from tanks previously used to store oils (i.e. animal or vegetable oils, petroleum products, natural gas):

Parameter	Daily Units		Monitoring Frequency	Sample Type	Notes
Oil & Grease	15	mg/L	See Note 2	Grab	(2) (3)

Additional requirements if test or disinfection water is chlorinated or comes from a chlorinated water supply:

Parameter	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
Total Residual Chlorine (salt)	13	μg/L	See Note 2	Grab	(2) (3) (4)
Total Residual Chlorine (fresh)	19	μg/L	See Note 2	Grab	(2) (3) (5)

Additional requirements if test or disinfection water is chemically dechlorinated:

Parameter	Daily MINIMUM	Units	Monitoring Frequency	Sample Type	Notes
Dissolved Oxygen (Class I, I-P, II)	5.0	mg/L	See Note 2	Grab	(2) (3) (6)

MARYLAND GENERAL DISCHARGE PERMIT NO. 17HT (NPDES NO. MDG67) - APPENDIX A Page A-3

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

Dissolved Oxygen (Class III, III-P, IV, IV-P) 6.0 mg/L See Note 2 Grab (2) (3)
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Additional requirements if discharges occur into Class III, III-P, IV, or IV-P water, as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B. (Required only from May through October)

Parameter	Daily Minimum	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
Temperature		REPORT	°F	2/Discharge	i-s	(3) (8)
Temperature Difference	0		°F	2/Discharge	i-s	(3) (8) (9)

Notes (for all tables)

- Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.
- (2) Required monitoring frequencies shall be based on volume of hydrostatic testing event as follows:

If effluent is 2,500 gallons or less for the event, minimum monitoring frequency shall be 1/discharge. If effluent is 2,501-50,000 gallons for the event, minimum monitoring frequency shall be 2/discharge. If effluent is 50,001 gallons or more for the event, minimum monitoring frequency shall be 3/discharge.

- (3) If your discharges are not subject to this requirement for a monitoring period, enter "NODI 9" for each respective entry in NetDMR.
- (4) Limit is applicable if the receiving stream for the discharges is salt water. The minimum quantification level for total residual chlorine is 0.10 mg/L. Report results below 0.10 mg/L as "NODI B" in NetDMR.
- (5) Limit is applicable if the receiving stream for the discharges is fresh water. The minimum quantification level for total residual chlorine is 0.10 mg/L. Report results below 0.10 mg/L as "NODI B" in NetDMR.
- (6) Limit is applicable if the receiving stream for the discharges is Class I, I-P, or II, as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B.
- (7) Limit is applicable if the receiving stream for the discharges is Class III, III-P, IV, or IV-P, as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B.
- (8) Two grab samples required: one at the beginning of discharge and one approximately midway through the discharge.
- (9) "Temperature Difference" is the arithmetic result of subtracting the water quality standard temperature or the ambient stream temperature upstream of the discharges (whichever is higher) from the effluent temperature or the temperature at the edge of a 50-foot mixing zone from the point of discharge. The water quality standard temperature is 68°F for Class III and III-P streams and 75°F for Class IV and IV-P streams. (Note: If the effluent temperature is below the water quality standard temperature, no instream measurements would be required to demonstrate compliance.)

Narrative Limitations:

 Cleaning of Used Vessels: All used tanks, pipes, or pipelines shall be cleaned before being filled with test water. All wastewater and removed solids resulting from cleaning operations shall be properly disposed in a manner which will not result in a discharge to waters of the State.

MARYLAND GENERAL DISCHARGE PERMIT NO. 17HT (NPDES NO. MDG67) - APPENDIX A Page A-4

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

- 2. **Appropriations:** If you are utilizing surface or ground waters of the State to perform hydrostatic testing, note the potential for additional requirements outlined in Part I.G.5 of this permit.
- 3. **Treatment Systems:** If discharges are directed into an oil/water separator, settling basin, or any other treatment system, the rate of discharge shall not exceed the design capacity of the treatment system.



Discharge Category B: Discharges from Potable Water Systems

Eligible Discharges:

Wastewater discharged from potable water utilities, including those from overflow, draining, or dewatering of reservoirs, vessels, or structures used to store or convey potable water for consumption. This category includes standing water and water from flushing, hydrostatic testing, mechanical cleaning (as defined in Appendix B), water main breaks, leaks, or other releases, as well as flushing of fire hydrants.

Discharges under this category that do not require effluent monitoring per the tables below are subject to narrative criteria found in this section and in applicable sections of the base permit.

Numerical Limitations:

The following numerical limitations are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Requirements for potable water sources where mechanical cleaning has occurred:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Discharge	Measured	(1)
Total Suspended Solids		60		mg/L	3/Discharge	Grab	(2)
рН	6.0	9.0		s.u.	3/Discharge	Grab	(2)

Requirements for potable water sources which have been super chlorinated:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Discharge	Measured	(1)
pH	6.0	9.0		s.u.	3/Discharge	Grab	(2)
Total Residual Chlorine (salt)		13		μg/L	3/Discharge	Grab	(2) (3) (4)
Total Residual Chlorine (fresh)		19		μg/L	3/Discharge	Grab	(2) (3) (5)

Additional Requirements for potable water sources which have been chemically dechlorinated⁽⁶⁾:

Parameter	Daily MINIMUM	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
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MARYLAND GENERAL DISCHARGE PERMIT NO. 17HT (NPDES NO. MDG67) – APPENDIX A Page A-6

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

рН	6.0	9.0	s.u.	3/Discharge	Grab	(2)
Dissolved Oxygen (Class I, I-P, II)	5.0		mg/L	3/Discharge	Grab	(2) (3) (7)
Dissolved Oxygen (Class III, III-P, IV, IV-P)	6.0		mg/L	3/Discharge	Grab	(2) (3) (8)

Notes (for all tables)

- Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.
- (2) Three grab samples shall be collected at approximate even intervals and analyzed separately.
- (3) If your discharges are not subject to this requirement for a monitoring period, enter "NODI 9" for each respective entry in NetDMR.
- (4) Limit is applicable if the receiving stream for the discharges is salt water. The minimum quantification level for total residual chlorine is 0.10 mg/L. Report results below 0.10 mg/L as "NODI B" in NetDMR.
- (5) Limit is applicable if the receiving stream for the discharges is fresh water. The minimum quantification level for total residual chlorine is 0.10 mg/L. Report results below 0.10 mg/L as "NODI B" in NetDMR.
- (6) For the purposes of this permit, the use of dechlorination tablets does not constitute chemical dechlorination. See Appendix B for the full definition.
- (7) Limit is applicable if the receiving stream for the discharges is Class I, I-P, or II, as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B.
- (8) Limit is applicable if the receiving stream for the discharges is Class III, III-P, IV, or IV-P, as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B.

Narrative Requirements:

- 1. **Pollution Prevention Plan.** While all discharge categories under this permit are required to develop and implement a Pollution Prevention Plan (PPP) in accordance with Part III.B.2, the PPP for this category are subject to specific inclusions mostly due to the likelihood of multiple discharge points), such as:
 - **a. Discharge Inventory:** The PPP must include a list of anticipated discharges which identifies type (flushing, line maintenance, etc.), expected quantity, quality, and location of each discharge.
 - **b. Potential Alternatives:** Identification of any alternative to surface discharge, such as sanitary sewer disposal, overland flow, storm sewer discharge or any other possible alternative.
 - **c. Prior Data:** Identification of any data regarding quality of previous discharges at the point of discharge and/or the point of entry into surface waters which may provide guidance for future activities.
 - **d. Treatment Options:** Identification of treatment options for different discharge types and locations.
 - **e.** Receiving Stream Information: Stream designated uses, relevant TMDLs, or other in-stream information which may reflect on impact of these discharges on waters of the State.

- f. Protective of Water Quality: The permittee is responsible for ensuring that their PPP includes practices sufficient enough for receiving waters to meet conditions associated with COMAR 26.08.03.06. If the Department identifies deficiencies in the PPP, the permittee shall have 90 days after receiving such a notification to update the PPP and provide written certification of such updates to the Department.
- 2. Chlorine: Per COMAR 26.08.03.06, discharges cannot contain chlorine or chlorine-containing compounds except in nondetectable levels, which is less than 0.1 mg/L as determined using either the DPD titrimetric or colorimetric method or an alternate method approved by the Department. In order to comply with this requirement, you may consider dechlorination via chemical addition, absorption onto activated carbon, and/or control of discharge rates/holding of the effluent to that chlorine residuals naturally dissipate. Any other removal technology must be approved by the Department prior to use.

While monitoring and reporting of chlorine is not required for all types of discharges under this category, you remain responsible for ensuring that your discharges meet the terms of this narrative condition. You must be prepared to demonstrate that your best management practices (BMPs) and treatment technologies are sufficient to meet the requirements of this condition if requested by the Department. All BMPs and treatment methods must be documented in your PPP.

- a. b.
- C.
- d.
- e.
- f.

Discharge Category C: Dewatering from Construction Activities

Eligible Discharges:

This category authorizes discharges of from construction dewatering activities and foundation drainage, so long as the water being discharged is uncontaminated (such as by organics or metallic elements in the groundwater). Contaminated groundwater may be eligible for coverage under Discharge Category D at the Department's discretion. The groundwater may be pumped out via a well-point system or removed from the excavation. Any commingled stormwater is also an allowed discharge.

Numerical Limitations for Discharges to ANY Surface Waters Under this Category:

The following numerical limitations are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Requirements for ALL discharges under this category:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Month	Measured	(1)
рН	REPORT	REPORT		s.u.	1/Week	Grab	

Requirements if any water being discharged is pumped from the excavation site AND concrete materials are in use:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Month	Measured	(1)
рН	6.0	9.0		s.u.	1/Week	Grab	

Notes (for all tables)

 Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.

Narrative Requirements:

1. *pH Monitoring*: For discharges where pH is "REPORT" or monitor-only, you are required to document pH measurements as part of your Pollution Prevention Plan (PPP). Should pH be outside the range of 6.0 to 9.0 for two consecutive weeks, you

must implement a corrective action to restore pH to the range specified. All necessary corrective actions shall be documented in the PPP.

- 2. Erosion and Sediment Control: Take particular note of Parts III.C.1 and III.C.3 of this permit regarding requirements for management of erosion and sediment. Discharges which cause a noticeable sediment plume in the receiving waters are not permitted. If such a condition is observed, you shall cease discharge as soon as possible and implement a corrective action.
- 3. Organics/Metals Monitoring: As part of your application for registration under this general permit, you must indicate if there is any cause for belief that the groundwater to be discharged has a reasonable potential to contain volatile organic compounds, metallic elements, or any other pollutant other than sediment. Any data which you have obtained or know to exist from environmental assessments or well point monitoring must be included as part of your application. If no data is available, the Department will typically require additional monitoring upon commencement of discharge (or before, if accessible). The Department reserves the right to waive this requirement using best professional judgment, if appropriate, based on an analysis of prior land use and other environmental factors in the area.
- 4. Conclusion of Construction Dewatering Activities: Once you conclude activities at the site which lead to discharges from dewatering, you may terminate coverage under this permit. Until you terminate coverage, you will continue to be responsible for submission of required discharge monitoring reports via NetDMR, even if you are only reporting "No Discharge."

Discharge Category D: Groundwater Remediation

Eligible Discharges:

This category authorizes discharges of groundwater which has been contaminated by volatile or semi-volatile organics, including that from foundation drainage, which has been treated using air stripping, air sparging, or carbon absorption to remove volatile organic compounds.

Discharges of groundwater which is contaminated solely by petroleum-based contaminants shall be covered under the General Discharge Permit of Treated Ground Water from Oil Contaminated Ground Water Sources to Surface or Ground Waters of the State, which is administered by the Department's Oil Control Program (see Part I.G.4).

Numerical Limitations for Discharges to Surface Waters Not Classified for Drinking Water:

The following numerical limitations apply to discharges to Class I, II, III, and IV streams (as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B) and are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Discharges of groundwater remediated to adjust pH

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Month	Measured	(1)
рН	6.0	9.0		s.u.	See Note 2	Grab	(2)

All discharges of remediated groundwater impacted by organics

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow	REPORT	REPORT	gpd	1/Month	Measured	(1)
Total Volatile Organics	100	REPORT	μg/L	See Note 2	Grab	(2) (3)

Discharges which include contamination by all gasoline, leaded or unleaded (among other contaminants)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
BTEX	100	REPORT	μg/L	See Note 2	Calculated	(2) (4)
Benzene	22	REPORT	μg/L	See Note 2	Grab	(2)

Toluene	REPORT	REPORT	μg/L	See Note 2	Grab	(2)
Ethylbenzene	REPORT	REPORT	μg/L	See Note 2	Grab	(2)
Xylene	REPORT	REPORT	μg/L	See Note 2	Grab	(2)

Discharges which include contamination by leaded gasoline (among other contaminants)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Total Lead (fresh)	REPORT	2.5	μg/L	See Note 2	Calculated	(2) (5)
Total Lead (salt)	REPORT	8.1	μg/L	See Note 2	Grab	(2) (6)

Discharges which include contamination by petroleum-based products other than gasoline (among other constituents)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Total Petroleum Hydrocarbons	15	REPORT	mg/L	See Note 2	Grab	(2) (7)
MTBE	REPORT	REPORT	μg/L	See Note 2	Grab	(2)
Naphthalene	REPORT	REPORT	μg/L	See Note 2	Grab	(2)

Discharges which include contamination by other organics

Parameter	CAS No.	STORET	Daily Max	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Benzene	71-43-2	34030	58	REPORT	μg/L	See Note 2	Grab	(2)
Bromodichloromethane	75-27-4	32101	27	REPORT	μg/L	See Note 2	Grab	(2)
Chlorodibromomethane	124-48-1	32105	21	REPORT	μg/L	See Note 2	Grab	(2)
Carbon Tetrachloride	56-23-5	32102	5	REPORT	μg/L	See Note 2	Grab	(2)
1,3-Dichlorobenzene	541-73-1	34566	10	REPORT	μg/L	See Note 2	Grab	(2)
1,2-Dichloropropane	78-87-5	34541	31	REPORT	μg/L	See Note 2	Grab	(2)
1,1,2,2- Tetrachloroethane	79-34-5	34516	3	REPORT	μg/L	See Note 2	Grab	(2)
Tetrachloroethene	127-18-4	34475	29	REPORT	μg/L	See Note 2	Grab	(2)
1,1,2-Trichloroethane	79-00-5	34511	8.9	REPORT	μg/L	See Note 2	Grab	(2)

Trichloroethylene	79-01-6	39180	7	REPORT	μg/L	See Note 2	Grab	(2)
1,2,4-Trichlorobenzene	120-82-1	34551	0.03	REPORT	μg/L	See Note 2	Grab	(2)
Vinyl chloride	75-01-4	39175	1.6	REPORT	μg/L	See Note 2	Grab	(2)

Numerical Limitations for Discharges to Surface Waters Classified for Drinking Water or Discharges to Groundwater:

The following numerical limitations apply to discharges to Class I-P, II-P, III-P, and IV-P streams (as defined by the Specific Designated Use Classes at COMAR 26.08.02.02B) and are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Discharges of groundwater remediated to adjust pH

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Month	Measured	(1)

All discharges of remediated groundwater impacted by organics

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow	REPORT	REPORT	gpd	1/Month	Measured	(1)
Total Volatile Organics	100	REPORT	μg/L	See Note 2	Grab	(2) (3)

Discharges which include contamination by all gasoline, leaded or unleaded (among other contaminants)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
BTEX	100	REPORT	μg/L	See Note 2	Calculated	(2) (4)
Benzene	22	REPORT	μg/L	See Note 2	Grab	(2)
Toluene	57	REPORT	μg/L	See Note 2	Grab	(2)
Ethylbenzene	68	REPORT	μg/L	See Note 2	Grab	(2)
Xylenes	REPORT	REPORT	μg/L	See Note 2	Grab	(2)

Discharges which include contamination by leaded gasoline (among other contaminants)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Total Lead (fresh)	4.10	2.04	μg/L	See Note 2	Grab	(2) (5)
Total Lead (salt)	13.28	6.62	μg/L	See Note 2	Grab	(2) (6)
Total Lead (ground)	30.15	15	μg/L	See Note 2	Grab	(2) (7)
1,2- Dichloroethane	5	REPORT	μg/L	See Note 2	Grab	(2)
Ethylene dibromide	0.05	REPORT	μg/L	See Note 2	Grab	(2)

Discharges which include contamination by petroleum-based products other than gasoline (among other constituents)

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Total Petroleum Hydrocarbons	15	REPORT	mg/L	See Note 2	Grab	(2) (8)
MTBE	REPORT	REPORT	μg/L	See Note 2	Grab	(2)
Naphthalene	REPORT	REPORT	μg/L	See Note 2	Grab	(2)

Discharges which include contamination by other organics

Parameter	CAS No.	STORET	Daily Max	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Benzene	71-43-2	34030	2.1	REPORT	μg/L	See Note 2	Grab	(2)
Bromoform	75-25-2	32104	7	REPORT	μg/L	See Note 2	Grab	(2)
Bromodichloromethane	75-27-4	32101	0.95	REPORT	μg/L	See Note 2	Grab	(2)
Chlorodibromomethane	124-48-1	32105	0.8	REPORT	μg/L	See Note 2	Grab	(2)
Chloroform	67-66-3	32106	60	REPORT	μg/L	See Note 2	Grab	(2)
Bromomethane	74-83-9	34413	47	REPORT	μg/L	See Note 2	Grab	(2)
Carbon Tetrachloride	56-23-5	32102	0.4	REPORT	μg/L	See Note 2	Grab	(2)
1,3-Dichlorobenzene	541-73-1	34566	7	REPORT	μg/L	See Note 2	Grab	(2)
1,2-Dichloroethane	107-06-2	34531	5	REPORT	μg/L	See Note 2	Grab	(2)
1,1-Dichloroethylene	75-35-4	34501	7	REPORT	μg/L	See Note 2	Grab	(2)
1,2-Dichloropropane	78-87-5	34541	0.9	REPORT	μg/L	See Note 2	Grab	(2)

MARYLAND GENERAL DISCHARGE PERMIT NO. 17HT (NPDES NO. MDG67) - APPENDIX A Page A-14

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

Ethyl benzene	100-41-4	34371	68	REPORT	μg/L	See Note 2	Grab	(2)
Methylene chloride	75-09-2	34423	20	REPORT	μg/L	See Note 2	Grab	(2)
1,1,2,2- Tetrachloroethane	79-34-5	34516	0.2	REPORT	μg/L	See Note 2	Grab	(2)
Tetrachloroethene	127-18-4	34475	5	REPORT	μg/L	See Note 2	Grab	(2)
Toluene	108-88-3	34010	57	REPORT	μg/L	See Note 2	Grab	(2)
1,1,2-Trichloroethane	79-00-5	34511	0.55	REPORT	µg/L	See Note 2	Grab	(2)
Trichloroethylene	79-01-6	39180	0.6	REPORT	µg/L	See Note 2	Grab	(2)
1,2,4-Trichlorobenzene	120-82-1	34551	0.03	REPORT	µg/L	See Note 2	Grab	(2)
Vinyl chloride	75-01-4	39175	0.022	REPORT	μg/L	See Note 2	Grab	(2)

Notes (for all tables)

- Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.
- (2) Required monitoring frequencies shall be based on volume of treated effluent as follows:

If effluent is 25,000 gallons or less per month, minimum monitoring frequency shall be 1/month. If effluent is 25,001-500,000 gallons per month, minimum monitoring frequency shall be 2/month. If effluent is 500,001 gallons or more per month, minimum monitoring frequency shall be 1/week.

The frequency shall be determined based on an expected typical month, not necessarily each month on its own. For example, if you routinely treat 50,000 gallons each month, but happen to treat only 24,000 in a given month, you should still monitor twice that month and each month going forward until you're routinely treating less than 25,000 each month.

- (3) "Total Volatile Organics" is the sum of all parameters measured by EPA Test Method 624. You shall attach a complete list of monitoring results for all parameters of Method 624 for each sample result when submitting results in NetDMR.
- (4) "Total BTEX" is the sum of benzene, toluene, ethyl benzene, and xylenes.
- (5) Limit is applicable if the receiving stream for the discharges is fresh water.
- (6) Limit is applicable if the receiving stream for the discharges is salt water.
- (7) Limit is applicable if the discharges are to groundwater.
- (8) "Total Petroleum Hydrocarbons" is the sum of all parameters measured by EPA Test Method 8015B.

Narrative Requirements:

 Treatment Method: The technology-based limitations for this category are based on what the Department has determined is achievable for air stripping, air sparging, and/or carbon adsorption. You must maintain a full description of your treatment system in your PPP, including a log of system inspections and/or repairs.

If you desire to use a different treatment method, you must submit system specifications and certifications which demonstrate to the Department that the system is capable of meeting all applicable numerical limits for the wastewater at your site. Documents which complete this demonstration must be attached to the NOI. The Department reserves the right to require an individual permit if it is not satisfied that the technology is sufficient.

2. Additional Application Requirement: In addition to a completed Notice of Intent (NOI), dischargers under this category must collect a minimum of one sample of the water to be discharged prior to any treatment and submit the results using EPA Form 3510-2C. Sampling results must be included for all parameters listed in Form 3510-2C Part V.B (except radioactivity parameters) and the "Metals, Cyanide, and Total Phenols" and "Volatile Compounds" section of Part V.C at a minimum. Parameters which are below the detection limits for their respective test method must indicate the value of the detection limit. Any parameters not tested as a result of the permittee believing there is no reasonable potential must be marked as "Believed Absent."

The complete, signed EPA Form 3510-2C shall be attached to the Notice of Intent upon submission. Analysis reports from the laboratory are not required for attachment unless requested by Department personnel. The Department reserves the right to require additional testing beyond what is submitted if it has reason to believe there is reasonable potential for any pollutants not included in the sampling analysis.

Discharge Category E: Draining or Flushing of Fire Control Systems

Eligible Discharges:

Wastewater from draining or flushing of fire control or fire suppression systems. This section does not include the flushing of fire hydrants, which are permitted under Discharge Category B of this permit.

Numerical Limitations:

The following tables list requirements which are to be monitored as directed, with results maintained on site along with the permit registration letter and to be made available upon request of Department personnel.

Requirements for all discharges under this category:

Parameter	Daily Minimum	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow		REPORT	REPORT	gpd	1/Discharge	Measured	(1)
Total Residual Chlorine		ND		mg/L	2/Discharge	Grab	(2) (3)
Temperature		REPORT		°F	2/Discharge	i-s	(2)
Temperature Difference	0			°F	2/Discharge	i-s	(2) (4)

Requirements for discharges which either exceed 100,000 gpd or half the flow of the receiving stream (Required only from May through October):

Parameter	Daily Minimum	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
Temperature		See Note 5	°F	See Note 5	i-s	(5)

Notes (for all tables)

- Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.
- (2) Two grab samples required: one at the beginning of discharge and one approximately midway through the discharge.
- (3) The limitation is identified as "ND," which indicates that chlorine must be below the minimum quantification level, which for total residual chlorine is 0.10 mg/L using either the DPD titrimetric or colorimetric method (or an alternative method, if approved by the Department). Report results below 0.10 mg/L as "NODI B" in NetDMR.

- (4) "Temperature Difference" is the arithmetic result of subtracting the water quality standard temperature or the ambient stream temperature upstream of the discharges (whichever is higher) from the effluent temperature or the temperature at the edge of a mixing zone which extends 50-feet radially from the outfall and, in flowing water, 50-feet in the direction of flow. The water quality standard temperature is 68°F for Class III and III-P streams, 75°F for Class IV and IV-P streams, and 90°F for Class I, I-P, and II streams. (Note: If the effluent temperature is below the water quality standard temperature, no instream measurements would be required to demonstrate compliance.)
- (5) For large volumes, you must verify compliance with the water quality standard by measuring temperature of the water to be discharged within thirty minutes prior to commencing discharge. If the temperature exceeds the water quality standard for the receiving stream (68°F for Class III and III-P; 75°F for Class IV and IV-P; and 90°F for Class I, I-P, and II), then during the discharge, you must monitor temperatures in even intervals (at least three measurements) at the edge of the 50-foot mixing zone, as identified in Note 4, above.

Narrative Requirements:

- 1. Chlorine: Per COMAR 26.08.03.06, discharges cannot contain chlorine or chlorine-containing compounds except in nondetectable levels. In order to comply with the numerical limitation outlined above, you may consider dechlorination via chemical addition, absorption onto activated carbon, and/or control of discharge rates/holding of the effluent to that chlorine residuals naturally dissipate. Any other removal technology must be approved by the Department prior to use.
- **2. Temperature**: The above numeric limitations on temperature are designed to prevent discharges from causing an in-stream exceedance of water quality standards. If your discharge is causing such an exceedance, you shall either reduce flows or decrease effluent temperatures to a level where in-stream dilution is sufficient for the water quality standards to be met at the edge of the allowable mixing zone.

Discharge Category F: Untreated "Water" Discharges

Eligible Discharges:

Discharges of untreated "water" in excess of 100,000 gallons per day (as a monthly average), untreated "water" with a flow which comprises more than half of the receiving stream flow, or untreated "water" otherwise required for coverage by the Department from water storage or distribution systems, including but not limited to hydrogeologic/aquifer/well head yield testing. This category is designed primarily to cover discharges of raw water overflows from intakes or aqueducts. This category excludes any water sources which have been chlorinated.

Numerical Requirements:

The following tables list requirements which are to be monitored as directed, during the months of May through October, with results maintained on site along with the permit registration letter and to be made available upon request of Department personnel.

Requirements for discharges which either exceed 100,000 gpd or half the flow of the receiving stream (Required only from May through October):

Parameter	Daily Minimum	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
Temperature		See Below	°F	See Below	i-s	

For large volumes, you must verify compliance with the water quality standard by measuring temperature of the water to be discharged within thirty minutes prior to commencing discharge. If the temperature exceeds the water quality standard for the receiving stream (68°F for Class III and III-P; 75°F for Class IV and IV-P; and 90°F for Class I, I-P, and II), then during the discharge, you must monitor temperatures in even intervals (at least three measurements) at the edge of a mixing zone which extends 50-feet radially from the outfall and, in flowing water, 50-feet in the direction of flow.

If an in-stream exceedance is occurring outside of the mixing zone, you shall take corrective action(s) such as decreasing the flow to meet water quality standards or ceasing discharge until cooler temperatures exist. You shall note any corrective actions taken in a log and maintain such log alongside the required monitoring results.

Narrative Requirements:

Discharges which create a visual plume of sediments or noticeably alter the color of the receiving stream are not permitted.

You shall reference the requirements of Part III.C.1 regarding erosion and sediment control, particularly if discharges typically occur over dry land or into shallow standing or flowing waters.

Discharge Category G: Tank Bottom Wastewater

Eligible Discharges:

Treated tank bottom wastewater from petroleum (i.e. gasoline, kerosene, fuel oil, 'No. 6 oil,' and aviation fuel only) storage tanks to surface waters. "Tank bottoms" is a term used to describe the combination of water, contaminated water, and sediments that collect on the bottom of storage tanks.

Numerical Limitations:

The following numerical limitations are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Parameter	Daily Maximum	Monthly Average	Units	Monitoring Frequency	Sample Type	Notes
Flow	REPORT	REPORT	gpd	1/Discharge	Measured	(1)
Oil & Grease	15	REPORT	mg/L	3/Discharge	Grab	(2)
BTEX	100	REPORT	μg/L	3/Discharge	Calculated	(2) (3)
Benzene	22	REPORT	μg/L	3/Discharge	Grab	(2)
Toluene	REPORT	REPORT	μg/L	3/Discharge	Grab	(2)
Ethylbenzene	REPORT	REPORT	μg/L	3/Discharge	Grab	(2)
Xylene	REPORT	REPORT	μg/L	3/Discharge	Grab	(2)
Total Suspended Solids (TSS)	60	REPORT	mg/L	3/Discharge	Grab	(2)

Notes

- Total volume of flow shall be measured and divided by the time over which the entire discharge occurred.
- (2) Three grab samples shall be collected at approximate even intervals and analyzed separately.
- (3) BTEX is the sum of benzene, toluene, ethylbenzene, and xylene concentrations.

Narrative Limitations:

1. **Biomonitoring:** You may only discharge tank bottoms wastewater after confirming via biomonitoring (subject to the testing terms in item 2 of this section, below) that each batch is not acutely toxic. Results from biomonitoring must be submitted to and approved by the Department prior to commencement of discharges.

- 2. **Biomonitoring Plan Approval**: Within three months after registration for Discharge Category A under this permit, you must submit a study plan for evaluation of effluent toxicity by using biomonitoring, accounting for the following terms at a minimum:
 - **a.** The study plan should discuss (1) sample and sample handling, (2) source and age of test organisms, (3) source of dilution water, (4) testing procedure/experimental design, (5) data analysis, (6) quality control/quality assurance, and (7) report preparation.
 - **b.** The testing program shall consist of one definitive acute testing event. This testing shall not be performed before the Department's acceptance of the study plan, as indicated by written approval.
 - i. The testing event shall include a 48-hour static renewal test using fathead minnow and a 48-hour static renewal test using a daphnid species.
 - ii. If the receiving water is estuarine, you may substitute estuarine species for those species specified above. Approved estuarine species for acute testing are sheepshead minnows, silversides, grass shrimp, and mysid shrimp. In all cases, testing must include one vertebrate species and one invertebrate species.
 - c. The sample used for biomonitoring shall be collected in the same manner and location as the samples analyzed for the effluent limitations and monitoring requirements for this outfall, and shall not be chlorinated. Testing shall be conducted in accordance with the procedures described in the EPA's Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, October 2002 and further revisions found on the EPA's website at (http://water.epa.gov/scitech/methods/cwa/wet/disk2_index.cfm).
 - **d.** Test results shall be submitted to the Department within one month of completion.
 - **e.** Test results shall be reported in accordance with MDE/WMA "Reporting Requirements for Effluent Biomonitoring Data".
 - **f.** If testing is not performed in accordance with MDE-approved study plan, additional testing may be required by the Department.
 - **g.** If the test results indicate that the effluent is toxic, the discharge will not be authorized by this permit.
 - h. Submit all biomonitoring-related materials to:

Maryland Department of the Environment WSA - Compliance Program 1800 Washington Boulevard, STE-420 Baltimore, Maryland 21230 Attn: Biomonitoring

Discharge Category H: Stormwater Discharges from Aboveground Tank Containment

Eligible Discharges:

This category authorizes discharges of stormwater from within dikes, berms, walls, or any other containment structure for aboveground storage sites which are not already covered by a different NPDES permit.

Visual Monitoring:

If a known spill or leak has occurred within the containment area since the time of the most recent prior stormwater discharge, visual monitoring is not necessary – as the sampling and numerical monitoring presented below are automatically required.

If no known spill or leak has occurred, the permittee shall visually inspect collected stormwater prior to opening the valve to the outfall. If a visible oily sheen is observed on the surface of the water, the following sampling and numerical monitoring is required. If any other product which had been previously contained in the tank is visible or otherwise detected, the permittee should defer to Narrative Criteria part 3.c below.

Numerical Monitoring:

The following numerical limitations are to be summarized on discharge monitoring reports and submitted via NetDMR in accordance with Part IV.F of this permit.

Sampling and numerical testing is required only if either a known spill has occurred within the containment area since the prior discharge or if an oil sheen is visually detected on the stormwater. Sampling and testing shall continue once per discharge until compliance with the limitations has been met for three separate, consecutive discharge sampling.

Requirements for stormwater from all petroleum tank containment structures

Parameter	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
Oil & Grease	15	mg/L	1/Discharge	Grab	

Additional requirements for tanks containing gasoline:

Parameter	Daily Maximum	Units	Monitoring Frequency	Sample Type	Notes
BTEX	100	μg/L	1/Discharge	Calculated	(1)
Benzene	22	μg/L	1/Discharge	Grab	

Toluene	REPORT	μg/L	1/Discharge	Grab	
Ethylbenzene	REPORT	μg/L	1/Discharge	Grab	
Xylene	REPORT	μg/L	1/Discharge	Grab	

Notes(for all tables):

(1) BTEX is the sum of benzene, toluene, ethylbenzene, and xylene concentrations.

Narrative Requirements:

- Outfall Valve: The outlet from all containment structures must be maintained in the closed position at all times, except during deliberate stormwater drainage operations.
- 2. Inspections/Logbook: You shall inspect the containment area a minimum of once per month and shall maintain a logbook of observations, particularly noting any observed spills or leaks. Any spilled or leaked product shall be properly cleaned up and removed as soon as possible. The logbook shall also contain results from all visual inspections prior to discharge of stormwater, as required in the "Visual Monitoring" section above. At a minimum, the log shall include the name of the person performing the inspection, date and time, and a brief description of observations of the containment area.
- 3. Spill Prevention and Response Procedures: You must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. These procedures are complementary to and do not replace any requirements of RCRA (42 U.S.C. §6901), the Department's Land Management Administration Oil Control Program, NFPA 30 Flammable and Combustible Liquids Code or the Spill Prevention, Control and Countermeasure (SPCC) Plan (as a requirement of 40 CFR § 112), At a minimum, you must implement:
 - a. Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur:
 - Quarterly inspection procedures for containers that are susceptible to spillage or leakage (e.g., used oil) to ensure the containment structures have no leaks/cracks, and that the outlets are properly sealed. Check that plugs are properly affixed, that valves are in working condition, and that neither are leaking;
 - c. Procedure for the discharge of any stormwater from a containment structure, requiring that a sample is taken to ensure that no visible or odorous pollutants are discharged. If a sample contains a visible sheen, floating solids or a

MARYLAND GENERAL DISCHARGE PERMIT NO. 17HT (NPDES NO. MDG67) - APPENDIX A Page A-23

Provides discharge authorization only upon Maryland Department of the Environment notification of registration.

- noxious smell, then you must discharge the remaining wastewater as directed by the "Numerical Monitoring" section above (for oily sheen) or to a sanitary sewer system or haul it to a recycler or TSDF (Treatment Storage & Disposal Facilities) or disposal facility;
- d. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- e. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team as described in Part III.C.1; and
- f. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you must notify the Department's Emergency Spill Response number at (866) 633-4686 and EPA's National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC, metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. Local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available